

Notice of Allowability

Application No.

10/813,635

Applicant(s)

SHI, GE

Examiner

Art Unit

Douglas Q. Tran

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/13/07.
2. ☒ The allowed claim(s) is/are 1-5.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

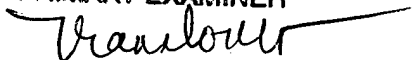
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DOUGLAS Q. TRAN
PRIMARY EXAMINER



EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The Applicant elected group I, comprising claims 1-5, and claims 6-20 withdrawn from further consideration. Election was made without traverse in the reply filed on 11/13/07.

Therefore, the nonelected claims 6-20 would be canceled.

The application has been amended to meet a condition for allowance as follows:

Cancel claims 6-20.

Allowable Subject Matter

3. Claims 1-5 are allowed.

Claim 1 is independent claim.

The following is an examiner's statement of reasons for allowance:

As to **claim 1**, the present invention from the current application discloses a method of *automatic white balance* comprising "determining an **illuminant source** by identifying a **predefined white area of a color space diagram** having a **highest number of pixels**, and determining a gain adjustment based on said average R value, said average G value, and said average B value of a **highest number of pixels**"

The closest prior art such as Oda et al. (U.S. Pub. No. 2004/0189821 A1), which is recorded on the Examiner's Citation of Pertinent Prior Art below, discloses a white balance

under illumination by arbitrary light source. To adjust the white balance by setting the gain of RGB according to the characteristics pattern of each illumination light source; and Cheng (US Patent No. 7,162,078 B2), which is recorded on the Examiner's Citation of Pertinent Prior Art below, discloses an automatic white balance method for image capturing apparatus. An image capturing apparatus captures a color image first and performs gray point searching in RGB color space. The color correction coefficient sets of red color, green color and blue color components of each gray points are computed respectively, and then the color correction coefficient sets of all the gray points are averaged to generate a color correction average value set.

However, from the prior art above, either separately or in combination, including an updated electronic text search, fails to anticipate or render the above underlined limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Oda et al. (U.S. Pub. No. 2004/0189821 A1) discloses a white balance under illumination by arbitrary light source. To adjust the white balance by setting the gain of RGB according to the

characteristics pattern of each illumination light source.

Cheng (US Patent No. 7,162,078 B2) discloses an automatic white balance method for image capturing apparatus. An image capturing apparatus captures a color image first and performs gray point searching in RGB color space or YUV color space. The color correction coefficient sets of red color, green color and blue color components of each gray points are computed respectively, and then the color correction coefficient sets of all the gray points are averaged to generate a color correction average value set.

Milkov et al. (US Pub. No. 2006/0192888 A1) discloses steps of finding RGB averages for AWB: In one aspect of the present invention, the system and method for determining pixel intensity average using pixel charge sharing may be utilized to average any group of pixels instead of the entire pixel array. The pixels to be averaged. For AWB, the R, G and B averages are determined separately to calculate the WB coefficients.

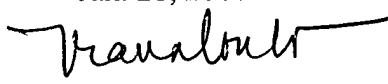
Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (571) 272-7442. The Examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Edward Coles can be reached on (571) 272-7402.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jan. 21, 2008


DOUGLAS Q. TRAN
PRIMARY EXAMINER